

Appl No. 09/701,066
Amdt. dated Aug. 11, 2004
Reply to Office action of Jun. 17, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-31 (canceled)

32 (Previously presented) An analyzer, comprising:

a sample chamber having a measuring surface and a plurality of walls, wherein at least one of the plurality of walls is radiation permeable;

a supply line fluidly coupled to the sample chamber and supplying a mixture of a chamber solution and a fluid immiscible with the chamber solution to the sample chamber;

wherein the sample chamber is configured such that a film of chamber solution is formed between the measuring surface and the immiscible fluid when the mixture is in the sample chamber; and

an optical detector coupled to the sample chamber and configured to detect an analyte signal from the film.

33 (Previously presented) The analyzer of claim 32, wherein the sample chamber is disposed within a sample chamber block, and wherein the supply line further comprises a closable injection opening.

34. (Previously presented) The analyzer of claim 33 further comprising at least one of a radiation source, a radiation conduit, and a radiation analyzer.

35. (Previously presented) The analyzer of claim 34 further comprising a first pump fluidly coupled to the supply line, wherein the first pump supplies the chamber solution to the

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chamber, and further comprising a second pump fluidly coupled to a removal line that is fluidly coupled to the sample chamber.

36. (Previously presented) The analyzer of claim 34 wherein the radiation source comprises a light source that produces a monochromatic light beam, wherein the radiation conduit comprises an optical prism, and wherein the radiation analyzer comprises an emission monochrometer.
37. (Previously presented) The analyzer of claim 36 wherein the radiation conduit and the light source are configured such that a light beam from the light source impinges upon the measuring surface at an angle larger than a critical angle, and wherein a fluorescence light generated at the measuring surface is directed via an optical system to the radiation analyzer.
38. (Previously presented) The analyzer of claim 32, wherein the chamber solution comprises at least one of a hydrophilic liquid and a hydrophobic liquid.
39. (Previously presented) The analyzer of claim 32, wherein the fluid that is immiscible with the chamber solution is selected from the group consisting of a gas and a liquid.
40. (Previously presented) The analyzer of claim 32, wherein the chamber solution comprises a buffer, and wherein the fluid that is immiscible with the chamber solution comprises a gas.
41. (Previously presented) The analyzer of claim 32, wherein the sample chamber comprises a radiation-permeable flow-through cuvette that has a rectangular or circular cross section perpendicular to a flow direction of the chamber solution.
42. (Previously presented) The analyzer of claim 41, wherein the at least one radiation permeable wall comprises quartz glass.
43. (Previously presented) The analyzer of claim 41, wherein the at least one radiation permeable wall further comprises a coating that promotes specific binding of the signal-

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generating molecule to the radiation permeable wall.

44. (Previously presented) The analyzer of claim 32, wherein the analyte comprises a biologically active molecule.
45. (Previously presented) The analyzer of claim 44, wherein the biologically active molecule comprises a protein, and wherein the biologically active molecule reacts with a ligand.
46. (Previously presented) The analyzer of claim 32, wherein the sample chamber is cylindrical, wherein a light-permeable rotor is rotatably disposed within the sample chamber, wherein the sample chamber is closed on one end by a light-permeable quartz plate, and wherein the analyzer further comprises a motor that actuates the rotor.
47. (Previously presented) The analyzer of claim 46 further comprising a removal line, wherein the rotor has a rotational axis, and wherein the supply line and the removal line are arranged diametrical to the rotational axis.
48. (Previously presented) The analyzer of claim 47 wherein the supply line and the removal line are at least partially disposed within the quartz plate.
49. (Previously presented) The analyzer of claim 46 wherein the supply line further comprises a closable injection opening.
50. (Previously presented) The analyzer of claim 47 wherein the rotor has a cone shaped surface, and wherein the rotational axis and a tangent to the cone-shaped surface form an angle between 58 degrees and 89.9 degrees.
51. (Canceled)
52. (Previously presented) A method of analyzing a component in a liquid, comprising:
providing a sample analysis chamber comprising a measuring surface;

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feeding a mixture of the liquid and a fluid that is immiscible with the liquid into the sample analysis chamber such that a film is formed from the liquid, wherein the film is disposed between the measuring surface and the immiscible fluid when the mixture is in the sample chamber; and

optically detecting an analyte signal from the film.

53. (Canceled)

54. (Canceled)

55. (Canceled)

56. (Canceled)

57. (Canceled)

58. (Canceled)

Claims 59-61 (canceled).